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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
08/913,803	09/22/97	BOCCON-GIBOD	G	RCA-87865

LM02/0815
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EXAMINER	
ONUAKU,C	
ART UNIT	**PAPER NUMBER**
2715	8

DATE MAILED: 08/15/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
08/913,803	Boccon-Gibod et al
Examiner	**Group Art Unit**
Christopher Onuaku	2715

☒ Responsive to communication(s) filed on *May 30, 2000*

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *1-10, 12-14, 16, and 17* is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☒ Claim(s) *12* is/are allowed.

☒ Claim(s) *1-10, 13, 14, 16, and 17* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-14&16-17 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 U.S.C. § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-10&13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lane et al (US 5,933,567) in view of McLaren et al (US 6,064,794).

Regarding claim 1, Lane et al disclose in Fig. 17,18& 19 digital video recorder capable of recording and/or reproducing recorded video images stored in the form of compressed digital data for use during fast forward, search and reverse modes of video recorder playback operation comprising the method steps of:

a) selecting one of plurality of "video programs" for reproduction (see col.53, line 40 to col.54, line 14);

b) selecting a reproduction speed for the one of the plurality of "video programs" (see col.53, line 40 to col.54, line 14);

c) selecting a digitally encoded signal from a set of signals corresponding to the one of the plurality of "video programs" responsive to the reproduction speed (see col.53, line 40 to col.54, line 14);

d) reproducing the digitally encoded signal from the set of signals (see col.55, line 54 to col.59, line 33);

e) "jumping" to different ones of the encoded signals for the reproduction in accordance with the predetermined "jump points" in response to subsequent selections of different "reproduction speed" (see col.56, lines 7-20);

f) decoding the reproduced signals for display of the selected program at the selected reproduction speeds (see col.37, line 28 to col.38, line 6);

Lane fails to explicitly disclose wherein step c above further comprises selecting digitally encoded signal from the set of digitally encoded signals corresponding to different speeds of reproduction with differing resolution values. McLaren et al teach in Fig.1&2 the provision of digitally compressed video material at speeds other than at normal play speed wherein MPEG-encoded image trickplay streams employing lower resolution and lower bit-rate than the normal play are provided for user selection. The use of a significantly lower bit-rate and/or resolution for encoding trickplay image streams may offer savings benefits when storage space and/or transmission costs are considered. In addition, human visual perception may also allow these trickplay image streams to be processed further to reduce resolution, and hence storage and transmission costs during trickplay video operation, without compromising perceived image

quality (see col.2, line 19 to col.4, line 25). It would have been obvious to one of ordinary skill in the art to modify Lane by realizing Lane with means to produce video streams (e.g., programs) at different speeds and different resolutions whereby image trickplay streams employing lower resolution and lower bit-rate than the normal play are provided for user selection, as taught by McLaren, since the use of a significantly lower bit-rate and/or resolution for encoding trickplay image streams may offer savings benefits when storage space and/or transmission costs are considered. In addition, human visual perception may also allow these trickplay image streams to be processed further to reduce resolution, and hence storage and transmission costs during trickplay video operation, without compromising perceived image quality . With Lane now modified by McLaren, it would have been obvious to select between the encoded signals with different speeds and different resolution values based on the user image quality requirement.

Regarding claim 2, Lane discloses the step of arranging the "jump" points in a nested "pattern"(see Fig.13b; col.41, lines 36-53).

Regarding claims 3&4, Lane discloses the step of selecting one signal of the digitally encoded set of signals for reproduction at a normal speed and other than normal speed (see col.53, line 40 to col.54, line 14).

Regarding claim 5, McLaren teaches the step of generating the other ones of the set for reproduction with a bit rate less than a bit rate of the one signal for reproduction at the normal play speed (see col.2, line 30 to col.3, line 20).

Regarding claim 6, Lane discloses the step of assembling the "jump points" as look up tables (see col.55, line 59 to col.57, line 67).

Regarding claim 7, Lane discloses the step of arranging the look up tables in groups where each one of the groups of the look up tables is specific to a reproduction speed (see col.55, line 59 to col 57, line 67).

Regarding claim 8, Lane discloses the claimed:

a) means for storing a plurality of program records wherein each program record having a set of digitally encoded signal records representative of each program (see col.21, line 34 to col.22, line 61);

b) means for linking the encoded signal records of each said set to one another at predetermined jump points for selecting reproduction from different ones of said set (see col.21, line 52 to col.22, line 5); and

c) wherein each said set of digitally encoded signal records has records of differing sizes for reproducing at a plurality of speeds (see col.56, line 62 to col.58, line 50).

Regarding claim 9, Lane discloses wherein the predetermined jump points are grouped specific to transitions between similar temporal program events for reproduction at differing speeds (see col.57, lines 35-48).

Regarding claim 10, Lane discloses wherein the predetermined jump points represent addresses of digital images within each said set which substantially correspond with one another (see col.57, lines 35-48).

Regarding claim 13, Lane discloses wherein a record for reproduction at a normal play speed represents a largest "byte" record (see col.36, lines 50-64).

Regarding claim 14, Lane discloses wherein records for reproduction at speeds other than a normal play speed represent records smaller than the normal play speed record and have sizes which decrease in proportion to reproduction speed (see col.36, lines 50-64).

4. Claims 16&17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lane et al in view of Abecassis (US 6,091,886).

Regarding claim 16, Lane discloses the claimed:

a) storage device (see claim 8 discussions), and each program containing tables of predetermined temporally similar addresses within each program record for selection between different play speeds (see col.55, line 59 to col.57, line 67);

b) transducing means (see heads 440 and Fig.11&18);

c) control means (see Fig.18&19; and servo control circuit 1600; col.55, line 30 to col.59, line 33).

Lane fails to explicitly disclose wherein each program contains multiple versions. Abecassis teaches a video device for the automated selective retrieval of non-sequentially-stored video segments of a video program, from a single video program source, responsive to a viewer's preestablished video content preferences, and the transmission of the selected segments as a seamless video program comprising variable content programs containing programs with multiple versions of the same program, and wherein, for example, a parent can view an "R" version of a program, and a child can view a "G" version of the same program (see col.4, lines 9-19; col.9, line 34-50; col.24, lines 55 to col.56, line 8). This provides the desirable advantage of, for example, both the parent and child viewing different versions of the same program. It would have been obvious to one of ordinary skill in the art to modify Lane by realizing Lane with the means providing multiple versions of the same program, as taught by Abecassis, which the desirable advantage of, for example, both the parent and child viewing different versions of the same program.

With Lane now modified with Abecassis, Lane can store multiple versions of programs, and the control means of Lane can transduce any one of the multiple versions of any one of the program selected by a user, thereby increasing the dynamic range of Lane.

Regarding claim 17, the claimed limitation wherein images are reproduced from a time which precedes the preceding version is inherent in Abecassis since Abecassis has random access capability.

Allowable Subject Matter

5. Claim 12 is allowable over the prior art of record.

6. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 12, the prior art of record fails to show or fairly suggest an apparatus for reproducing video programs where the apparatus comprises wherein the linking means comprises N sets of tables, each set comprises (N- 1) tables of the predetermined jump points for each of N reproduction speeds.

Conclusion

7. Any inquiry concerning this communication or earlier communications from this examiner should be directed to Christopher Onuaku whose telephone number is (703) 308-7555. The

examiner can normally be reached on Tuesday to Thursday from 7:30 am to 5:00 pm. The examiner can also be reached on alternate Monday.

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Wendy Garber, can be reached on (703) 305-4929.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-6306 and (703) 308-6296, (for formal communications intended for entry)

Or:

(703) 308-6306 and (703) 308-6296 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be direct to the Group receptionist whose telephone is (703) 305-4700.

COO

8/9/00

Wendy Garber
Supervisory Patent Examiner
Technology Center 2700